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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
TORRES VELAZQUEZ, NORCA LIZ

ART UNIT	PAPER NUMBER
1771	14

DATE MAILED: 06/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/581,040	DE MEYER ET AL.	
	Examiner	Art Unit	
	Norca L. Torres-Velazquez	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 May 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *42-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *42-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

4) ☐ Interview Summary (PTO-413) Paper No(s).

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 31-39 have been considered but are moot in view of the new ground(s) of rejection.

2. Applicants' remarks on paper 13 that indicate that their invention is a reinforcement layer and not a hose with a reinforcement layer have been noted.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claims 42-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claim 42 includes the limitation "... that comprise at least one inner layer, said textile reinforcement layer and an outer layer..." Applicants have indicated on paper 13 that their invention is a reinforcement layer and not a hose with a reinforcement layer. The limitation above is confusing because it is not clear if the reinforcement layer itself has 3 layers? Or if that Applicant is including this limitation to imply the intended use of the reinforcement layer in hoses and similar extended objects that include the reinforcement layer and also have inner and outer layers?

body to be reinforced, particularly in a substantially perpendicular direction to the longitudinal axis of the body to be reinforced", this is an intended use and no patentable weight is given.

What is a "textile bond"? It is not clear if Applicants are trying to claim the stiffening is a separate layer or element, or it being part of the reinforcement layer?

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 42-45 are rejected under 35 U.S.C. 102(b) as being anticipated by PLONTGES et al. (US 4,857,379).

PLONTGES et al. discloses a sheet like structure of fibers useful as reinforcement. The fabric incorporates plastic yarns in the warp and the weft direction. The yarns consist of a material, e.g. polyester or polyolefin that shrinks under the impact of a temperature below the melting point of the material. After the impact of the heat and the consequent shrinking, the material reassumes its original firmness. (Refer to Abstract, also Column 2, lines 46-61) The reference teaches constructions in which the warp and weft threads are interwoven with each other, and also a construction that includes a knitted fabric construction with a bonding chain holding together two layers of threads. (Column 1, lines 56 through Column 2, lines 1-4) The [illegible] which soften under the action of heat, provides a novel

PLONTGES et al. further teaches that in a tubular construction the structure has high-tenacity inextensible threads 2 extending in the longitudinal direction of the tube if the component is to be loaded in the direction of its length, while the threads 1 which are extensible under deformation conditions run in the transverse direction. The reverse construction is also possible, for example for a tube, which is loaded by internal pressure. (Column 4, lines 41-49).

On Column 5, the table shows the preferred values for the threads employed including the composition and melting points of threads 1, threads 2 and bonding chain 3. It shows that the bonding chain with a higher melting point than threads 2 of the structure.

Therefore, the reference above discloses a reinforcement layer in the form of a woven or knitted fabric that includes a stiffening material in the form of first threads with a lower melting point than second threads. In the alternative, the reference teaches an embodiment that includes a laid fabric of two superimposed layers of threads or yarns 1 and 2 that reads on the stiffening textile product of the present application, and a knitted fabric that reads on the reinforcement layer. In the preferred values for the threads of the reference, the table shows that the bonding chain is made of polyester yarns with a melting point higher than the polyolefin PP threads 2.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Le NOUVEAU (US 6,085,798) discloses an external reinforcement for a flexible pipe that comprises a reinforcement (2) that consists of non-contiguous coils (7,8) and an intermediate

the coils 7, 8. The warp filaments 12 have a low elastic modulus, compared with the weft

filaments 13. The reference teaches that the strip can be produced as a weave or a knitted fabric. The reference further teaches that the strip can be produced with the warp and weft in perpendicular angles or in such a way that the weft filaments 13 are inclined, forming angles of about 55° to the warp filaments 12.